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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,969	06/19/2005	Robert Frans Maria Hendriks	NL021370	8352

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
CONNOLLY, PATRICK J	

ART UNIT	PAPER NUMBER
2877	

MAIL DATE	DELIVERY MODE
10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,969	HENDRIKS ET AL.	
	Examiner	Art Unit	
	Patrick J. Connolly	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1st November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19th June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

AU 2877
09.20.2007

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06.19.2005; 11.01.2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear to what "each sampling position" is intended to refer. Is this a sampling position within the combined measurement and reference wavefront? Does this sampling position correspond to a position of a measurement probe? Does this sampling position correspond to the position of a scanned mirror?

Claims 1-16 further refer to "one picture element". It is unclear to what this is referring. Is this a picture element of a detector array? How does this picture element relate to the measurement beams and the presumed other picture elements?

The following action is based on the claims as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 10 and 13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent Application Publication to Mittleman et al (hereafter Mittleman).

As to claims 1, 10 and 13, Mittleman discloses a method of interferometric imaging including (See figure 3):

providing a reference and measurement beam (110, 114);

combining the reference and measurement beams to provide a combined beam (to detector 118);

modulating the reference beam (via movable mirror 110);

sampling the combined beam to measure an amplitude of intensity variation for sampling positions of a sampling table (see paragraph [0075]);

adding the amplitudes to provide an intensity signal for a pixel (see paragraph [0075]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mittleman as applied above.

As to claims 5 and 7, Mittleman is silent with respect to the use of fibers to transport the measurement and reference beams.

The Examiner takes Official Notice of the fact that it is well known in the art to use fibers for light transportation in OCT systems as a way to ensure accurate and stable delivery of light information.

It would have been obvious to one of ordinary skill in the art at the time of invention to include fibers in the method and apparatus of Mittleman in order to achieve said advantage.

As to claim 8, Mittleman is silent with respect to the application of motion compensation algorithms.

The Examiner takes Official Notice of the fact that it is well known in the OCT and interferometry art to apply motion compensation algorithms to imaging data in order to remove image artifacts and thereby achieve more accurate and clear image data.

It would have been obvious to one of ordinary skill in the art at the time of invention to include such a scheme in the method and apparatus of Mittleman in order to achieve said advantage.

Allowable Subject Matter

If the issues with respect to clarity were to be resolved by means of amendment, and the subject matter of dependent claims 2-4, 6, 9, 11, 12 and 14-16 were to be incorporated into their respective parent claims, then they would be allowable.

The following is a statement of reasons for the indication of allowable subject matter:

As to claims 2, 11 and 14, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method or arrangement for OCT including: determining a phase offset of the intensity variation of each sampling position with respect to a phase reference;

providing an adjustable filter for the measurement beam; and controlling the filter to compensate for phase offsets *in combination* with the other limitations of claims 2, 11 and 14.

As to claim 6, the prior art of record, taken alone or in combination, fails to disclose or render obvious selectively applying stress to individual fibers in a fiber bundle in order to compensate for corresponding phase offsets, in combination with the rest of the limitations of claim 6.

As to claims 9, 12 and 16, the prior art of record, taken alone or in combination, fails to disclose or render obvious acquiring and calculating intensity as a function of depth between the image and focal plane for each picture element or pixel according the claimed equation, in combination with the rest of the limitations of claims 9, 12 and 16.

"Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged

with rebutting the well-known statement in the **next reply** after the Office action in which the well known statement was made."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Connolly whose telephone number is 571.272.2412. The examiner can normally be reached on 9:00 am - 7:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571.272.2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patrick Connolly 10 2877
09.20.2007